U.S. Forest Service
Research and Development

November 2015

Research and Development Draft Tribal Engagement Roadmap Highlights Report

Forest Service Research and Development has been conducting research for many years with Tribes and in Indian country. In March of 2015, Research and Development published the *Tribal Engagement Roadmap*, which outlines an agenda for Forest Service Research and Development to better serve, engage with, and learn from Indian Tribes and other indigenous groups. The Roadmap supports and implements the goals and objectives outlined in the agency-wide Tribal Relations Strategic Plan and contributes to the broader Forest Service Tribal Relations Program. **Research and Development (R&D) has now created a final draft of the *Tribal Engagement Roadmap Highlights Report*, which will be available at the White House All Nation's Conference November 5th.**


Tania Ellersick 2014. Northern Utah

The U.S. Forest Service *Research and Development Tribal Engagement Roadmap Highlights Report*:

- Provides recent examples of tribal engagement that reflect the aims of the *Tribal Engagement Roadmap*,
- Identifies areas where the agency should move forward, and
- Offers a means to share that information internally and externally across different sectors, interests, and geographic regions.

Objectives

The *Research and Development Tribal Engagement Roadmap* supports and implements the goals and objectives outlined in the agency-wide Tribal Relations Strategic Plan. The creation of the *Tribal Engagement Roadmap Highlight Report* helps us as Forest Service employees to institutionalize our Trust responsibilities; communicate areas and opportunities for tribal engagement; increase and advance tribal and indigenous values, knowledge, and perspectives within R&D; and network and coordinate within R&D and across deputy areas to increase R&D program and U.S. Forest Service effectiveness. This document also serves to communicate and connect some of the existing partnerships and endeavors with tribes, indigenous and native groups, tribal colleges, tribal communities, and intertribal organizations (all objectives of the *R&D Tribal Engagement Roadmap*).

U.S. tribes are an integral part of our American story, leaders in our natural resource heritage and the original stewards of the land we hold so dear.

—Tom Tidwell, Chief, U.S. Forest Service


Tania Ellersick 2014. Northwest Oregon

Methodology

R&D's research scientists/tribal liaisons at each of the seven research stations provided updates on current research efforts, partnerships, agreements, youth engagement, assistantships/internships, and collaborative initiatives. Of the multitude of recent efforts relayed to the Washington Office, R&D staff chose 27 items to highlight in this report. The items focus on, but are not limited to, the work of the Forest Service Research and Development deputy area. These highlighted items were chosen to reflect examples from broad geographic regions across the United States at various scales (local/landscape, regional, national, and international). U.S. Forest Service research scientists and tribal partners, including some of the agency's student research scientists and interns, provided information, text, edits, photographs, and quotes. The items that are highlighted were also chosen to present a broad suite of benefits and values the agency is tasked to provide and protect, as well as to describe some of the many research methodologies and technologies that can support tribal decision-making on natural resource issues (Roadmap objectives 4&5).

Content

The topics highlighted in this report reflect many of the traditional issues managed by the U.S. Forest Service. Governments in the United States and abroad are contending with past human disturbance, degraded and shifted ecosystems and habitat, invasive insects and plants, fire risk, and increased human populations and related energy demands, development, and loss of forest cover. The Forest Service and tribal governments are interested in forest products and their inventory, sawmill operations, fuel reduction, and restoration, and the highlighted items demonstrate the interest and need for partnering and collaboration across landscapes. The effects of globalization, climate change, and environmental injustice are evident and the needs to respond to these issues urgent – indigenous populations are particularly vulnerable to climate change impacts - confronting disproportionate risks to their culture and economies (Parrotta and Agnoletti 2012, Lynne et al 2011). Much, if not most, of tribal engagement resources are utilized to protect remaining species, habitats, and places of cultural value, as well as the people that depend on them. These items illustrate the importance of efficient institutional/forest governance processes and a need for increased capacity and resources.

Linda Kruger 2014. Adelaide (Di) Johnson, a Forest Service hydrologist, and Sierra Ezzrè, a Tlingit High School student from Juneau, Alaska, conducting a geomorphology beach survey in Yakutat, Alaska

Jonathan Long 2015. Native American research assistants Ray Gutteriez and Jessica Lackey sample wild strawberries during a tour of forest restoration projects at Blodgett Forest as part of training on fire management.

These examples also illustrate an intrinsic understanding of connectivity across the landscape and across elements of forest ecosystems (i.e., the integration of trees and understory plants and fungi or the link between the headwaters of streams and resulting fish spawn). Tribes have a unique reciprocal relationship with respect for and responsibility to ecological processes, places, and species that demonstrate a holistic view of natural resource management that has evolved over centuries (Lynne et al. 2013). There are also topics highlighted that may be somewhat unfamiliar to the intended broad audience of this report. These tribal engagement endeavors help describe the multiple values and benefits and the "ecosystem services" that forests provide, including the cultural benefits that are integral to tribal identity and existence. Topics such as traditional ecological knowledge, traditional forest management, agroforestry, traditional foods, gender considerations, and sociocultural impacts are also highlighted. These examples from various geographic regions provide cases where place-based information and local history links to ecological, economic, and sociopolitical global processes. These cases of tribal engagement have informed Forest Service responsibilities within the International Union of Forest Research Organizations (IUFRO) and the World Forestry Congress and are integral to our participation in global issues such as Forest Landscape Restoration and carbon sequestration.

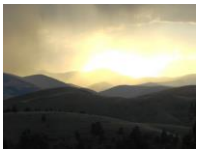
Again, there are similarities in the traditions of tribal communities and the traditions of the Forest Service—all share a respect for individuals who have engaged in these natural landscapes throughout their lives and for communities who have these areas and identities entwined over generations. These traditions, both agency and tribal, are committed to restoring and protecting these areas for present and future generations. Developing relationships with American Indian, Alaska Native, and other indigenous peoples is fundamental to protecting traditional knowledge and culture and finding effective solutions to landscape-scale challenges in the context of climate change and development. The commitment reflected in this tribal engagement document illustrates how cross-cultural learning, transparency, and relationship building can help revitalize tribal communities and rural America, reduce poverty, and facilitate environmental justice.

Frank Lake USFS 2015. Frank Lake, Yurok Tribal member, Research Ecologist and Tribal Liaison for the Pacific Southwest Research Station.










The R&D Tribal Engagement Roadmap Highlights:

Local and Landscape Scale Engagement

- Coastal Geomorphology and Traditional Food in Southeast Alaska
- Wood Energy and Forest Products in Alaska
- Mapping, Cultural Values, and Collaborative Restoration in Washington
- Wildfire Risk, Fuels Management, and Technology in Oregon
- Blending Traditional and Scientific Ecological Knowledge & Special (Non-Timber) Forest Products
- Traditional Food in California
- Agroforestry and Traditional Forest Management for Restoration in California
- Fisheries, Genetics, and Citizen Science in Idaho, Montana, Oregon and Washington
- Climate Change and Partnering in Arizona and New Mexico
- Vegetation Recovery, Carbon Dynamics, Climate Change and Post-Fire Management in Arizona
- Land Management Training and Tools for the Southern and Eastern Regions of the United States
- Climate Change Adaptation and Seed Banking in North Carolina
- Tribal Climate Change Adaptation Partnership in the Southern Region
- Forest Inventory & Special/Non-timber Forest Products in the Great Lakes Region
- Forest Products and Sawmill Operation in Wisconsin
- Youth Engagement and Restoration in Maine

Regional Scale Engagement

- Socio-Cultural Impacts of Non-Native Insect Infestation from the Lake States to the Atlantic
- Women's Empowerment and Climate Change in the Northeastern United States

National Scale Engagement

- U.S Tribal Connections Map
- Agroforestry Practices in the United States
- Wildlife Research Assistantships Across the United States
- Student Research Support across the United States
- Indian Forest Management and Research Across the United States
- Special Non-Timber Forest Product Assessment for the United States

International Engagement

- Invasive Species in the United States and Abroad
- Traditional Forest Knowledge and International Engagement
- Improving Forest Governance by Strengthening Public Forest Institutions on a Global Level

Moving Forward

This *U.S. Forest Service R&D Tribal Engagement Roadmap Highlights Report* shows only a fraction of tribal engagement efforts ongoing across the country. There are notable absences in this report, including (but not limited to) the importance of native grassland ecosystems and urban forests; issues regarding public health (i.e., the link between disease and the loss of traditional foods); the spiritual aspect of water (particularly headwaters, which in some communities are areas of origin/creation); the impacts of drought; wildlife (in relation to food and identity); differences in values (i.e., perceptions of wilderness; valuation of nonmarket values and social science methodologies, and the issue of relocation, especially in regard to coastal communities. In addition, only the tribal communities with the resources to engage with other entities are discussed here—some of the poorest, most marginalized communities that could benefit from increased capacity are not mentioned in this report. It should be noted that Americans Indians and Native Alaskans are the poorest people in the United States with a poverty rate of 29.2 percent, nearly twice the 2013 national average for the Nation as a whole (U.S. Census Bureau 2014). Ongoing efforts supported by U.S. Forest Service programs and policies should not only build on existing efforts, but seek opportunities with the tribal communities that could benefit the most from collaborative engagement. A number of U.S. Forest Service initiatives, strategies, and guidelines aim toward the equitable distribution of rights

and resources (and their associated benefits/values) that work towards ecological, economic, and social sustainability. These include the U.S. Forest Service Tribal Engagement Strategy, the U.S. Forest Service R&D Tribal Engagement Roadmap, the 2012 revision of the U.S. Forest Service Planning Rule (Code of Federal Regulations, Title 36, Part 219), the U.S. Forest Service National Roadmap for Responding to Climate Change, and the U.S. Forest Service Strategic Plan: FY 2015–2020.

U.S. Forest Service R&D has the opportunity to move forward in a number of ways. By describing how R&D incorporates indigenous knowledge and values to improve upon our work, and including this information in our presentations, briefing papers, and best management practices, we can help increase and advance tribal and indigenous values, knowledge, and perspectives. By networking and coordinating within R&D and across Forest Service deputy areas, we can help describe how indigenous values and knowledge will be addressed (for instance within an ecosystem services perspective in the 2012 U.S. Forest Service Planning Rule). By sharing information, tools, and methodologies used by R&D (i.e. nanotechnology, eDNA, stream monitoring, forest vegetation models, etc.) we can support tribal decision-making on natural resource issues. There are also opportunities for developing workshops, webinars, presentations, training materials, and events that will help U.S. Forest Service staff understand their legal responsibilities for treaty rights, other reserved rights, and trust responsibilities, including obligations for government-to-government consultation. These efforts would not only build U.S. Forest Service capacity, but help institutionalize our trust responsibilities. We can build new and enhance existing partnerships in part by identifying ways to sponsor more students and exposing them to research, finding opportunities for scientists to teach at Tribal Colleges and Universities, learning from tribal communities' research and incorporating these findings in future activities, and co-publishing with tribal scientists. By promoting and advancing collaborative work with tribes and tribal organizations, we can improve our collective ability to find effective solutions to some of the most challenging issues our agency has had to contend with.

In order for us, as the U.S. Forest Service to deliver on our agency's strategic plan, Federal trust responsibility, various national-level policies, and the U.S. Forest Service mission, we must engage with tribal communities. We cannot sustain these ecosystems, the economy, or society without them. By engaging tribal communities in the broad suite of benefits and values our forests and grasslands provide, we can move toward full and effective participation in natural resource management and fulfill our mission to meet the needs of present and future generations.

We firmly believe that engaging with tribes on projects that incorporate traditional cultural and spiritual approaches with the best available science will lead to new and effective ways to accomplish sustainable land management across all landscapes. We invite all our partners to join Forest Service Research and Development in this effort.

—Carlos Rodriguez-Franco, Acting Deputy Chief,
Research & Development, U.S. Forest Service

Ken Rahaim Smithsonian Institution 2007

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